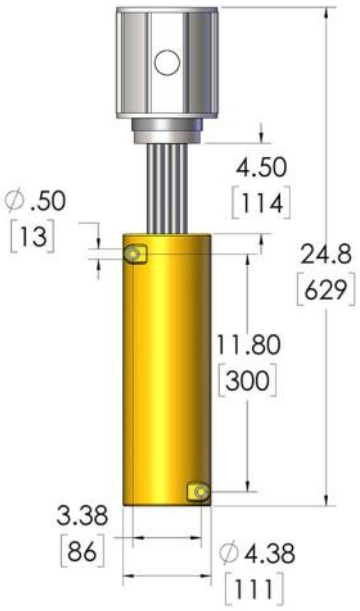
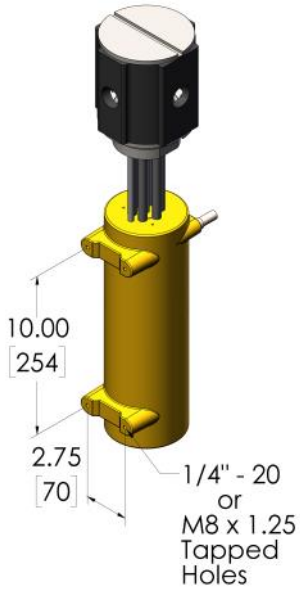
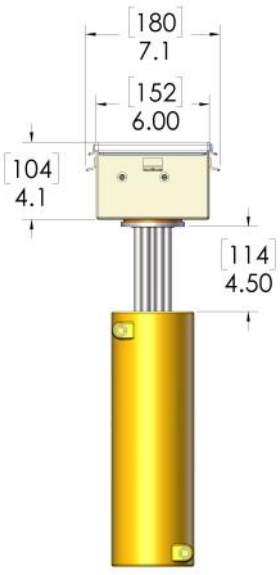
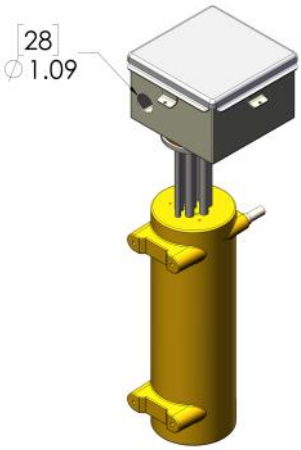
CAST-X High Temp 2000 Circulation Heater



With Explosion-Proof Enclosure







With Water Resistant Enclosure

SPECIFICATIONS:

Power:
- 1 - 6 kW
- Voltage Range: 120 - 480 V

Tubing:
- .50” OD (1/2") (12.7 mm) .065” Wall (1.7 mm)
- Overall Process Tube Length: 150” (381 cm)
- Inconel 600 material
- Max Pressure: See below chart

Flow-Tube Max Operating Pressures *Pressure ratings vary depending on operating temp.*			
°F	°C	psi	bar
200-800	93-427	5118	353
900	482	4094	282
1000	538	2712	187
1100	593	768	53
Note: Data taken from Circor/Hoke Flareless Tube Fittings Tubing Data Charts.			

Heater Body Material:
- Cast Bronze

Enclosures:
- Explosion-Proof Enclosure, certified to:
  Class 1, Div. 1 & 2, Groups A, B, C, D
  Class 2, Div. 1 & 2, Groups E, F, G
  Class 3, Div. 1 & 2
  CSA, with US and Canada Mark
- Water-Resistant Enclosure, certified to:
  NEMA/EEMAC Type 4, 12, 13
  CSA, File No. 42184: Type 4, 12
  IEC 60529, IP66 Ingress Protection
  Certifications are for enclosure only.

Max Heater Operating Temperatures:
- With Water Resistant Enclosure: 1112°F (600°C)
- With Explosion Proof Enclosure: 1112°F (600°C)

Temperature Sensors:
- 2 Thermowells in Heater Body (up to 2 temp sensors)
- K or J Type Thermocouple
- RTD, 100 ohm, 3 wire

Available Accessories:
- Insulating Jacket
- Compression Fittings

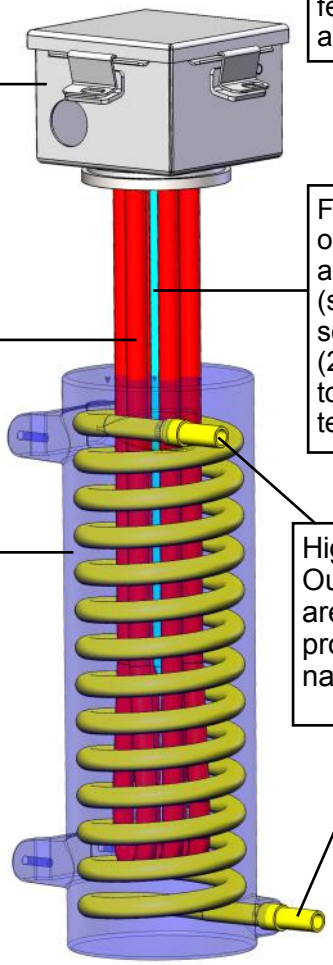
CAST-X High Temp 2000 With Optional Insulating Jacket

CAST-X High Temp 2000 Circulation Heater

Features and Benefits

CAST-X HT 2000 is available with a certified moisture-resistant terminal enclosure (seen here) or with an explosion-proof rated enclosure. Both are mounted in a “standoff” position, away from the heater body’s high temps.

600°C / 1112°F Max Operating Temp: CAST-X High Temp 2000 is one of very few circulation heaters capable of achieving such temperatures.



For optimal temperature control and over-temp protection, HT 2000 units are available with RTDs or thermocouples (single or dual-junction). Temperature sensors are mounted in thermowells (2 available) located in the heater body, to generate a very accurate operating temperature signal.

The heating element's exposed portion, standing above the heater body, is not heated, a key safety feature on HT-2000.

CAST-X HT heater bodies are made from cast bronze, for thermal and structural integrity over a long lifespan.

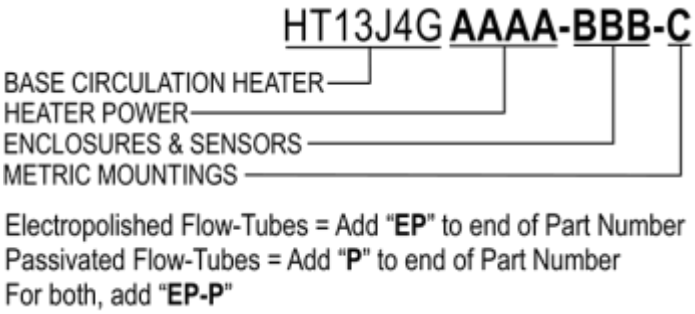
High Pressure Compatible Flow-Tubes: Our Inconel 600 seamless flow-tubes are compatible with high pressure gas processing applications, including natural gas and cryogas vaporization.

SOUTHEAST THERMAL SYSTEMS

WWW.SETHERMAL.COM SALES@SETHERMAL.COM phone: 704-399-4248

CAST-X HIGH TEMP 2000 Circulation Heater 8-2019

Part Numbering Details



Electropolished Flow-Tubes = Add "**EP**" to end of Part Number
Passivated Flow-Tubes = Add "**P**" to end of Part Number
For both, add "**EP-P**"

Building a CAST-X HIGH TEMP 2000 Part Number

Use the graphs below to build your CAST-X HT 2000.
Assigning numbers for sections AAAA and BBB.
If you need metric mountings, assign "M" to section C.
If metric mounts are not required, leave sec. C blank.
For assistance or special orders, contact CAS directly.

VOLTAGE, POWER, CIRCUIT TYPE				
Volts refers to line volts (VL). Amps refers to line current (IL).				
Section "AAAA"	**Circuit Type** (all are single circuit)	**Volts (V)**	**Watts (kW)**	**Amps (A)**
30SA	THREE PHASE DELTA	480	6.0	7.2
		440	5.0	6.6
		415	4.5	6.3
		400	4.2	6.0
		380	3.8	5.7
		240	1.5	3.6
		230	1.4	3.5
		220	1.3	3.3
		208	1.1	3.1
30SB	THREE PHASE WYE	575	2.9	2.9
		480	2.0	2.4
		415	1.5	2.1
		400	1.4	2.0
		380	1.2	1.9
		240	0.5	1.2
		230	0.4	1.2
		220	0.4	1.1
		208	0.3	1.1
30SC	SINGLE PHASE	480	6.0	12.5
		415	4.5	10.8
		400	4.2	10.4
		380	3.8	9.9
		347	3.1	9
		240	1.5	6.3
		230	1.4	6.0
		220	1.2	5.7
		208	1.1	5.4
		120	0.4	3.1
30SD	SINGLE PHASE	480	4.0	8.3
		415	3.0	7.2
		400	2.8	6.9
		380	2.5	6.6
		347	2.1	6.0
		240	1.0	4.2
		230	0.9	4.0
		220	0.8	3.8
		208	0.7	3.6
		120	0.3	2.1
30SE	SINGLE PHASE	480	2.0	4.2
		415	1.5	3.6
		400	1.4	3.5
		380	1.2	2.3
		347	1.0	3.0
		240	0.5	2.1
		230	0.4	2.0
		220	0.4	1.9
		208	0.3	1.8
		120	0.1	1.0

30SF	THREE PHASE DELTA	240	6.0	14.5
		230	5.5	13.8
		220	5.0	13.2
		208	4.5	12.5
30SG	THREE PHASE WYE	415	6.0	8.3
		400	5.5	8.0
		380	5.0	7.6
		240	2.0	4.8
		208	1.5	4.2
30SH	SINGLE PHASE	240	6.0	25
		230	5.5	24
		220	5.0	22.9
		208	4.5	21.7
		120	1.5	12.5
30SJ	SINGLE PHASE	240	4.0	16.7
		230	3.7	16
		220	3.4	15.3
		208	3.0	14.4
		120	1.0	8.3
30SK	SINGLE PHASE	240	2.0	8.3
		230	1.8	8.0
		220	1.7	7.6
		208	1.5	7.2
		120	0.5	4.2
30SL	SINGLE PHASE	240	1.5 Same as 300C	6.3
30SM	SINGLE PHASE	240	1.0 Same as 300D	4.2
30SN	SINGLE PHASE	120	1.5 Same as 300H	12.5
30SP	SINGLE PHASE	120	1.0 Same as 300J	8.3
30SQ	THREE PHASE DELTA	208	4.5 Same as 300F	12.5
30SR	THREE PHASE WYE	208	1.5 Same As 300G	4.2
30SS	SINGLE PHASE	208	4.5 Same as 300H	21.7
30ST	SINGLE PHASE	208	3.0 Same as 300J	14.4
30SU	SINGLE PHASE	208	1.5 Same as 300K	7.2
30SV	THREE PHASE DELTA	208	6.0	16.7
		120	2.0	9.6
30SW	THREE PHASE WYE	380	6.6	10.1
		208	2.0	5.6
30SX	THREE PHASE DELTA	208	3.0	8.3
		120	1.0	4.8
30SY	SINGLE PHASE	208	6.0	28.8
		120	2.0	16.6

ENCLOSURES AND TEMPERATURE SENSORS			
All thermocouples are ungrounded, for optimal performance			
Section "BBB"	**Description**	**No. of Sensors**	**Enclosure**
W00	NO SENSOR	0	WATER RESISTANT
W0J	J-TYPE THERMOCOUPLE IN THERMOWELL	1	WATER RESISTANT
W0K	K-TYPE THERMOCOUPLE IN THERMOWELL	1	WATER RESISTANT
W0R	RTD, SINGLE, 3 WIRE, 100 OHMS	1	WATER RESISTANT
WJJ	J-TYPE THERMOCOUPLES IN THERMOWELLS	2	WATER RESISTANT
WKK	K-TYPE THERMOCOUPLES IN THERMOWELLS	2	WATER RESISTANT
WRR	RTDs, EACH IS 3 WIRE, 100 OHMS	2	WATER RESISTANT
E00	NO SENSOR	0	EXPLOSION PROOF
E0J	J-TYPE THERMOCOUPLE IN THERMOWELL	1	EXPLOSION PROOF
E0K	K-TYPE THERMOCOUPLE IN THERMOWELL	1	EXPLOSION PROOF
E0R	RTD, SINGLE, 3 WIRE, 100 OHMS	1	EXPLOSION PROOF
EJJ	J-TYPE THERMOCOUPLES IN THERMOWELLS	2	EXPLOSION PROOF
EKK	K-TYPE THERMOCOUPLES IN THERMOWELLS	2	EXPLOSION PROOF
ERR	RTDs, EACH IS 3 WIRE, 100 OHMS	2	EXPLOSION PROOF

METRIC MOUNTING HOLES	
Place an "M" In section D if metric mounting holes are required. *If standard Imperial mounting holes are desired, section D can be left blank*	
Section "D"	**Metric Mounting Holes**
M	M8 X 1.25 METRIC TAPPED MOUNTING HOLES

ACCESSORIES	
These PNs are totally separate from the PNs for the heater.	
Part Number	**Component**
274-55-6-5	COMPRESSION FITTINGS (HIGH PRESSURE) / PAIR (SHIPPED LOOSE)
307-0-29-1	INSULATION JACKET, MAXIMUM TEMPERATURE 1472°F (800°C)

VALUE ADDED OPTIONS FOR FLOW-TUBES	
If you need electropolished or passivated flow-tubes, add these letters to the end of your part number. For both, indicate "EP-P"	
PN Adder	**Additional Service**
P	PASSIVATION: TO CLEAN FLOW-TUBE ID (USES A DILUTED NITRIC ACID FLUSH)
EP	ELECTROPOLISHED TUBE ID: RA VALUE: 10 MICROINCHES (.254 MICROMETERS)

CUSTOM DESIGNS & COMPONENTS
For these options, please call a CAS Representative for a quote.
THICK WALL TUBES FOR HIGH PRESSURE APPLICATIONS
SPECIAL TUBE FITTINGS